AIR FORCE MATERIEL COMMAND

LEADING EDGE

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Logistics Transformation.

Improving warfighter support

LEADING EDGE

Headquarters
Air Force Materiel Command
Wright-Patterson Air Force Base, Ohio

Commander
Gen. Lester Lyles

Director of Public Affairs
Col. Donna Pastor

Chief, Internal Communications
Maj. Michael Kelly

Executive Editor
Ms. Libby VanHook

Managing Editor
Ms. Estella Holmes

Associate Editor
Lt. Gailyn Whitman

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AFMC AIR FORCE MATERIEL COMMAND

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Cover Stories

Cover design by Maj. Mike Kelly, AFMC/PAI.

4 - 16 AFMC Logistics transformation

The Air Force Materiel Command Logistics Directorate has begun a journey down the path of transformation. Turn the page to read how they're working to improve their organization and processes to better support the warfighter.

Mission Progress

Features

Departments

More than 25 years ago, the Air Force Academy opened its doors to a new era when the first female cadets crossed into the blue. Read all about it on page 24.

AEDC wind tunnel testing assists turbine program

ARNOLD AIR FORCE BASE, Tenn. — 2nd Lt. Rodney Miller (left), and test engineer Mr. Sandy MacLanahan (right), check out the installation of the FMU-152 turbine alternator installed in a full-scale joint direct attack munition prior to wind-tunnel testing at Arnold Engineering Development Center.

The turbine alternator is shown inserted into a wall in the bomb body and attached to a lanyard for deployment upon weapon release.

— Information provided by AEDC Public Affairs

Edwards F-15 crew flies a first by dropping WCMD

EDWARDS AIR FORCE BASE, Calif. — Test pilot Maj. Dan Daetz and Lt. Col. Dan Morin, a weapons system officer, both from Edwards, recently dropped two wind corrected munitions dispenser systems over the Navy's China Lake test range. This was the first WCMD drop from an F-15E.

The WCMD is a tail kit slated to replace the existing tails on cluster bomb dispensers. The new tail will enable these weapons to compensate for the effects of wind, launch transients and ballistic errors, achieving greatly improved accuracy. WCMD-equipped weapons are planned for employment on the B-1, B-52, F-15E, F-16 and F-117 aircraft.

— Information provided by AFFTC Public Affairs

B-52 crew launches dual standoff weapons

EDWARDS AIR FORCE BASE, Calif. — A B-52 crew from the 419th Flight Test Squadron here successfully launched two AGM-154A Joint Standoff Weapons recently at two different targets on the Naval Air Systems Command Western Test Range in California.

The developmental test sought to finalize B-52 and JSOW integration and demonstrate successive multiple launch capability to different targets.

After launch, the JSOWs flew exactly as planned, gliding to their targets for five minutes.

With B-52 integration complete, JSOWs will soon be delivered to B-52 bases for operational use.

— Information provided by AFFTC Public Affairs and AAC Public Affairs

Tests could improve C-17 and C-130 capabilities

EGLIN AIR FORCE BASE, Fla. — C-17 Globemaster III and C-130 Hercules aircrews might soon be better armed to counter enemy threats thanks to recent flare testing here designed to take enemy fire away from the aircraft.

Experts from the 46th Test Squadron conducted several days of flare testing in conjunction with Air Mobility Command. Unlike flares people all over the world use to draw attention to themselves in emergencies, these aircraft flares focus attention away because that attention usually comes in the form of a heat-seeking missile.

According to Capt. Anthony Thomas, 46th TS Defensive Systems Test Flight commander, C-17 and C-130 crews launch flares as defense against heat-seeking missiles, hoping the missile will be drawn toward the flares and not the aircraft.

He added that many United States' enemies have the capability to launch man-portable heat-seeking missiles, so requests for the testing came down from leadership fast and with a high priority.

— Information provided by AAC Public Affairs

ESC systems help Poland join NATO team

HANSCOM AIR FORCE BASE, Mass. — Installing instrumentation landing and tactical air navigation systems at four Polish Air Force bases, Electronic Systems Center experts here helped pave the way for Poland to enter the North Atlantic Treaty Organization.

In addition to the navigation and landing equipment, program office experts also provided radios for the control towers.

The $8.1 million needed for Polish defense officials to purchase and install the equipment came via a U.S. Office of Defense Cooperation grant.

— Information provided by ESC Public Affairs

F-117 test force expands fighter's combat capability

EDWARDS AIR FORCE BASE, Calif. — Test experts are expanding what the stealth fighter brings to the fight by allowing the aircraft and its pilots to receive and transmit mission and target data in real-time from the air.

Developmental test experts at Air Force Plant 42 in Palmdale recently teamed up with their operational counterparts from Holloman AFB, N.M., to complete the second phase of the integrated real-time information into the cockpit/real-time information out of the cockpit combat aircraft flight-test project, known as IRRCA.

Phase one tests, completed in October of 1998, allowed a pilot to receive live-threat information and manually re-plan a mission from the cockpit. The second phase completed the test cycle by transmitting real-time mission and target data out of the cockpit to command and control forces on the ground.

In phase two flight tests, pilots focused on relaying real-time weapons delivery feedback from the point of release to the point of impact back to command and control assets on the ground.

Both developmental and operational tests also showed a pilot could transmit preliminary battle damage assessments and mission reports from the cockpit to the ground within minutes after releasing a weapon.

Experts from test, operational and acquisition communities are working to include the F-117's time-critical targeting capabilities in the Joint Expeditionary Force Experiment, or JEFX, in August. This year's chief-of-staff sponsored experiment will focus on new integrated intelligence, surveillance and reconnaissance technologies.

— Information provided by AFFTC Public Affairs

Logistics transformation focuses on improved warfighter support

By Gen. Lester Lyles
AFMC Commander

There is an ancient Chinese saying, "may you live in interesting times." For Air Force Materiel Command, those interesting times are now! We've begun our journey down the path of transformation with our eyes wide open and reality staring us squarely in the face.

We're taking a hard look at ourselves and the opportunities to improve our organization — and processes — which will ultimately provide better support to the warfighter and equip them with extensively improved capabilities.

Changes ahead

The command's mission areas most ripe for *transformation* and enhancement are supply management and depot maintenance. There have been many efforts to improve these areas over the years but none having the strategic, integrated approach we now have in place through our transformation efforts.

This edition of the *Leading Edge* sheds some light on the exciting changes taking place in AFMC's logistics functions and programs, and provides a glimpse into the significant challenges we face.

Logistics review

You'll read about the impressive list of initiatives resulting from the Air Force Chief of Staff's Logistics Review. The review provides us with the opportunity to significantly streamline our logistics operations, which are vital to improving combat support to America's warfighters.

Transformation

Depot Maintenance Reengineering and Transformation is another hot topic covered in this issue. DMRT will help us achieve our goal of being the world's best provider of maintenance and repair capabilities.

Part of the reengineering process is the construction of a long-range depot strategy designed to improve support to the warfighter and enhance the financial performance of our three depots.

Spares campaign

As the 21,000 people working in AFMC's depots know all too well, Air Force aerospace power is largely dependent on our ability to fly and sustain.

Our spares campaign featured on the following pages addresses the need to improve parts supportability for increasingly aging weapons system like the venerable B-52 Stratofortress, which has been flying now for more than half a century.

Aging systems

At no other time in history has the Air Force been required to maintain a force structure with the myriad support problems, including technical surprises, which are characteristic of the aging weapon systems we support today. The average age of our aircraft is now some 22 years!

From maintaining complex 50-year old aircraft structures to updating and improving archaic computer software languages, the demands on our maintenance skills have never been greater.

New technologies

As we contend with these older systems and equipment, we must also continue to integrate support for the new and advanced technology now entering the inventory.

This edition of *Leading Edge* clearly shows we are responsible for the biggest, most capable military aerospace sustainment organization in the world.

It's our responsibility to provide warfighters the right product, in the right place, at the right time while sustaining systems and spare parts that ensure readiness in peace, and capability in combat.

Gen. Lester Lyles, Air Force Materiel Command Commander, tours the GE rotor shop at Tinker AFB, Okla. Through AFMC transformation efforts, supply management and depot maintenance are taking a hard look at their organizations and processes in an effort to provide better support to the warfighter. (OC-ALC photo)

AFMC committed to providing 'worldclass' service

Warfighters at center of logistics radar

By Brig. Gen. Terry Gabreski
AFMC Director of Logistics

"Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur." (Italian Air Marshall Giulio Douhet, 1928.)

Logistics transformation in AFMC is well underway. Our defining purpose is to provide our warfighters world class service — connecting our processes to warfighter outcomes.

The metric for success is that the warfighter grades our service world class, not that we measure our processes successful despite warfighter satisfaction. The warfighter rules!

Transformation for logisticians cannot be a bumper sticker — it's imperative.

From financial performance, to end to end management of our supply chains, to lean depot maintenance that results in responsively and predictively meeting warfighter demands — this is the transformation that we have been embarked on for some time.

It's a long journey

As we continue down our path we must take to heart the centrality of the warfighter and their requirements to our success. We hear comments that the warfighter doesn't understand us or what we do.

As we put the warfighter at the center of our radar, the question we must ask ourselves is how much should we expect that tip of the spear warfighter to understand us.

Natural consequences

Here's a corollary. When you go to the car dealer of your choice for a product, how much do you actually care about understanding their business? Don't you primarily want a reliable car when you need it at the right price?

You select and patronize a car company due to research and a reputation of outstanding service and support at a price you can afford. Your repeat business is due to the outstanding performance of their product.

How do car companies get you to come back as a customer? They make their product your car of choice.

Supporting the warfighter

As you read through this edition of the *Leading Edge* and review the transformation initiatives you are part of, you will see that the thread running through is dramatically improving how we make America's airmen on our front lines successful — keeping the warfighter right in our crosshairs. This warfighter driven performance management must be the results of our effort.

To achieve that result, we in AFMC must perform as a team across boundaries and in partnership with warfighters and suppliers. We must be willing to break down barriers to change versus letting those barriers slow us down.

"Victory in this campaign will be measured in warfighter satisfaction."

Brig. Gen. Terry Gabreski,
AFMC Director of Logistics

Depot Maintenance Reengineering and Transformation, Spares Campaign, Chief's Logistics Review, our Logistics Readiness Cell — all of these efforts focus on the customer, but require us to perform as teams in ways we may not have done before.

Influencing destiny

We, Air Force Materiel Command logisticians, have the opportunity now to influence our destiny.

The complexity of what we do cannot be understated — the need to perform more responsively cannot be more urgent.

Some of the vehicles to seize this opportunity follow in the pages of this edition. I invite your attention to these articles.

More important, I solicit your active involvement in the success of these efforts. Victory in this campaign will be measured in warfighter satisfaction.

Crewchiefs from the 26th Air Expeditionary Wing of Air Force KC-10A Extender wing change a high intensity light bulb on the wing at an operating location in support of Operation Enduring Freedom. The AFMC Logistics Response Cell provides a central point of contact for spare parts and supplies needed for frontline units.

Logistics Division

Supporting the war on terrorism

Following the events of September 11, 2001, Americans can no longer take freedom and security for granted. For the Air Force Materiel Command logistics community, the terrorist attack was a wake-up call to gear up for supporting warfighters in this new war on terrorism.

Improving processes

Within hours of the first plane slamming into the World Trade Center, the Air Force Materiel Command battlestaff was activated and the logistics directorate stood up a Logistics Response Cell, or LRC.

The cell is designed to provide major commands with a central point of contact regarding spare parts, transportation, supply logistics plans and depot maintenance activities, according to Col. Mike Saville, chief, AFMC Logistics Plans, Programs, Integration Division. "The LRC quickly set improved processes in motion to identify critical needs, respond to major command inquiries and expedite needed parts and supplies."

Initially, the major commands and AFMC logistics communicated in a weekly high impact target, or HIT, listing that identified spare aircraft parts the commands deemed most critical to their initial response operations. "The list alerts us to zero balance conditions in deployed readiness spares packages," said Col. Saville.

Providing visability

Through the use of a simplified version of the Weapon System Management Information Systems, Support, Analysis and Visability, or WSMIS/SAV, item managers at each of the air logistics centers are alerted to critical requirements. Item managers are then required to document actions taken to improve back order status. The bottom line is a "hands-on" individual treatment of the most critically identified spare parts requirements.

'Surging'

The HIT list has become a vital tool for AFMC leadership to identify trends and communicate requirements to leadership at each of the ALCs. And in turn, when assets are below needed critical levels, depots can take action to provide rapid fill actions. This process is known as "surge."

Surge has been used by all three of AFMC's logistics centers to produce and repair parts quickly, decreasing the time airplanes stay in programmed depot maintenance. Surge is accomplished by adding manpower and work, shifts, reassigning personnel to shops with the highest priority workloads, increasing shop capacity, buying additional materials and spending additional funding for contractor support.

"So far, the results have been outstanding," said Col. Saville. "The combined efforts have pushed backorders from a high of nearly 6,000 to below 2,000 — the lowest in more than two years."

Time is of the essence

"The next link in the chain of supporting the warfighter is quickly getting them the parts they need," he said. At Wright-Patterson Air Force Base, Ohio, the AFMC Logistics Support Organization, or LSO, an operating agency for the Air Force Joint Personal Property Shipping Office, is leading that undertaking. As the air clearance authority for all Air Force cargo in the defense transportation system, their job is to manage and control the flow of cargo to the warfighters.

When logistical complexities of transporting cargo to deployed forces in any one of some twenty different countries on any given day, the CONUS Distribution Cell, or CDMC, is set up to manage and control that flow.

Making it easy

"The distribution cell uses every means available to provide warfighters a single-stop service to locate, divert, expedite and provide visibility for mission critical cargo shipped in support of Operation Enduring Freedom," said Mr. Howard English, chief, AFMC Logistics Support Office.

"In setting up the cell, all the needed tools for the distribution cell were present, with the exception of the people," said Mr. English. Air Force reservists answered the call.

"Within a few weeks, eight reservists were recalled to active duty," he said. Within 30 days of their activation a concept of operations and working cells were in place at Wright-Patterson, Dover AFB, Del., Travis AFB, Calif., and Norfolk Naval Air Terminal, Va. Following concurrence by the major commands, Brig. Gen. Terry Gabreski, AFMC Director of Logistics, approved operations of the cell for action. Cell members attend a daily war room conference where each mission critical part is scrutinized for a better way to get it to the warfighter.

Saving time

Defective parts returning from the theater also receive special attention. The faster they get to the source of repair, the quicker they can be fixed and made available again. In today's world of lean weapon systems support every day saved in the supply chain process is vital to the overall war effort.

According to Mr. English, the cell treats all spare parts equally. "CDMC has become the ambassador of all parts and the 'United Nations' of transportation. Everyone is welcome. It doesn't matter what language they speak, as long as they are focused on destruction of the enemy."

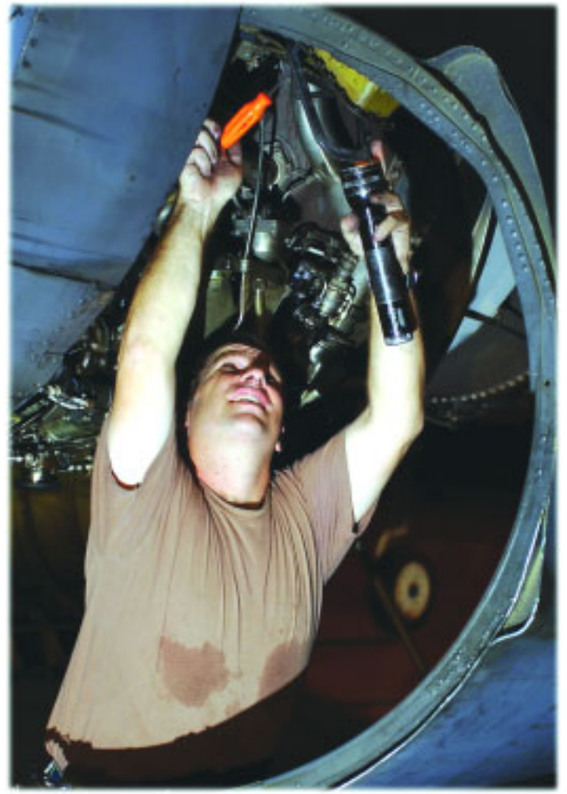
Only two rules

There are a few unwritten ground rules. "The first is to never assume parts are available," said Mr. English. Team members must call customers to check on available parts.

"The second rule is to never let team members become more important than the warfighter," he said. "Warfighters are our ultimate customers, so go back to rule one."

"These processes, from notification, to rapid repairs, to vectoring the product to the warfighter, go on 24 hours a day making sure the pointed end of the spear stays sharp and ready to defeat our common enemy," said Col. Saville. This is the changing focus of AFMC logistics — providing agile combat support enabling combat engagement anytime, anywhere.

— Ms. Libby Van Hook, AFMC Public Affairs



All three AFMC Air Logistics Centers are surging to meet critical needs in support of Operation Enduring Freedom in response to terrorist attacks on Sept. 11. Top: An Air Force engine specialist from the 28th Air Expeditionary Wing conducts routine maintenance on an air turbine starter for a B-1B Lancer. (U.S. Air Force photo by Staff Sgt. Shane Cuomo) Bottom: An Air Force crewchief conducts a door seal replacement on the wing of a B-52 Stratofortress at a deployed location in support of OEF. (Air Force photo by Staff Sgt. Larry Simmons)

Benchmarking depots with industry

Mr. Jeff Richardson, a mechanic from the wheel buildup unit at Hill Air Force Base, Utah, puts the final touches on a wheel assembly. (OO-ALC photo)

In September 2001, Air Force Materiel Command Logistics took an aggressive stance to implement benchmarking as a standard process improvement tool in depot maintenance.

Benchmarking is the process of continuously comparing and measuring against other organizations to gain information on philosophies, policies, practices, and measures that will help an organization improve performance.

"The air logistics centers have benchmarked each other and commercial industry for several years," said Col. Sarah Smith, chief, AFMC Depot Maintenance Division. "What is being implemented now is a formal, command-wide process."

This process blends both the ongoing improvements that come from daily management and the breakthrough improvements that come from reengineering. It allows depot maintenance to understand their own processes and compare them inside and outside the Air Force.

The benefits of benchmarking are improved profits and effectiveness, accelerated change, ability to stretch goals, breakthroughs and innovations, creation of a sense of urgency, overcoming the "not invented here" syndrome, helping users see outside the box, and most importantly the understanding of first class performance, according to Col. Smith.

"Process improvement that includes benchmarking is the key to achieving and maintaining world-class status," Col. Smith said.

Stoplight performance standards will be established for each product or process showing the status as red for unacceptable, yellow for marginal, and green for acceptable. Red and yellow product owners will be alerted to apply internal benchmarking. Products or processes that remain red, or are chronically yellow, may be considered as candidates for external benchmarking.

The internal benchmarking process is nothing more than traditional process improvement or searching for techniques to fix, improve and stabilize the product or process.

After internal benchmarking alternatives have been exhausted without achieving the desired result, the product or process becomes a candidate for external process improvement or benchmarking.

External benchmarking is also used to take acceptable processes to a new level of excellence.

Possible sources for external benchmarking include superior comparable processes within a center, other centers, other governmental agencies, and industry.

The external benchmarking steps are:

- Ensure benchmark decision and internal benchmarking actions completed; form external benchmarking team headed by product or process owner.
- Research comparable processes in: AFMC, other governmental agencies and industry for superior benchmark candidate.
- Conduct site visits and work with benchmark partner to define, measure and analyze both processes.
- Compare performance and determine gaps between the process and the benchmark.
- Implement improvement/corrective action plans to narrow and close gaps.
- Stabilize process and recalibrate benchmarks.
- Report and share best practices.

The process is repeated until the product is as good as the benchmark or better.

— Ms. Crystal Reed, AFMC Public Affairs

Regional Supply Squadrons

Changing the way AFMC supplies troops

Air Force Materiel Command is changing the way it meets the supply needs of the warfighter.

Newly formed Regional Supply Squadrons, or RSS, prioritize requirements and act as an authoritative focal point for all sources of supply, said Lt. Col. Mark Douglas, chief, AFMC Logistics Supply division.

The RSS is designed to relieve field level supply of several core supply processes. These processes are highly automated and deal with spares and equipment management for Air Force weapon systems, according to Col. Douglas.

Reorganization

AFMC is planning to reorganize its supply program to incorporate the RSS system by lessening field supply responsibilities. The implementation of a RSS will complement the current A-76 supply operations, he said.

The development of the Air Expeditionary Force brought a great many changes to the Air Force. One of those changes was in the supply arena. The needs of the AEF and the individual major command's were rapidly exceeding the capability of the old system of supply due to Air Force downsizing, said Col. Douglas.

In the years following Desert Storm the Air Staff's Jump Start initiative directed the Air Force to reduce the size of its supply field by either reengineering, which is reorganization, or by strategic sourcing, using A-76 outsourcing or privatization, said Col. Douglas.

AFMC chose to use the strategic sourcing option and uses A-76 system of supply. Four other commands opted for reorganization to include Air Mobility Command and Pacific Air Forces.

Supply processes

RSS will handle five supply processes. They include: weapon system support, equipment management, stock control, stock fund management and computer operations.

According to Col. Douglas, weapon system support includes mission capability management and reporting to ensure weapon systems are not down waiting for parts or support equipment. Equipment management is an essential supply process, needed to maintain mission readiness.

Air Force Materiel Command's Regional Supply Sqaudron acts as an authoritative focal point for all sources of supply to the warfighters. Here, cargo is loaded onto a C-17 aircraft at Davis-Monthan AFB, Ariz., in support of Operation Enduring Freedom (U.S. Air Force photo by Staff Sgt. Jim Steele)

RSS equipment managers will aggressively take action to assure field units have correct equipment allowances and authorizations for both home-station and deployed locations, he said.

The equipment management team looks for shortages or overages and redistributes excess assets to needy units ensuring equal distribution of equipment.

Stock control establishes requirements and requisitioning assets for stock and customer requirements, said Col. Douglas.

Stock control needs money to function and stock fund management is closely linked to the stock control process. AFMC has a budget of nearly $860 million which keeps supplies on the shelf or on order to meet customer demands.

Computer operations is the final process tying the management and funding processes together. Col. Douglas said the RSS will operate, schedule and manage the Standard Base Supply System computer operations, centralizing control of the supply process.

"Field units retain full access to the system, but most of the day-to-day requirements for running the computer, producing reports and analyzing performance will fall upon the RSS," he said.

A single voice

The primary goal of the RSS is to "improve AFMC's leverage with Defense Logistics Agency, its primary supplier, by speaking with a single voice. It will perform regionalized processes at an equal or better level using fewer personnel, allowing saved personnel to be reassigned to areas that need help," Col. Douglas said.

The AFMC RSS vision is "logistics professionals providing world-class weapon system readiness and sustainment through regional support of AFMC bases and centers," he said.

AFMC RSS will provide centralized, standardized supply and logistics services giving increased weapon system support to the warfighter.

AFMC Logistics Supply plans to begin initial operations at the new Regional Supply Squadrons in September.

— 2nd Lt. Gailyn Whitman, AFMC Public Affairs

Chief of Staff Logistics Review

Setting a new standard for business

The Air Force Chief of Staff, Logistics Review, or CLR, is helping to reorganize the base level logistics process to meet customer needs and improve Expeditionary Air Forces readiness and deployment.

"The review determined process change was necessary in several areas," said Lt. Gen. Michael Zettler, Air Force Deputy Chief of Staff, Installations and Logistics.

Training

The first area of focus is technical training and officer development. Senior non-commissioned officers need better training for expanded leadership roles when they deploy under EAF, Gen. Zettler said.

"Air Force training policy should be changed to synchronize training cycles with the AEF rotational cycle," he said.

Logistics officers also need more comprehensive training at technical school and through mentoring programs at the wing level. The review revealed a decline in logistics plans officer experience levels due to officer career cross flow into the other logistics functional areas such as maintenance or transportation.

"This cross flow detracts from development of core competencies," said Gen. Zettler. The result was an initiative to redefine the core logistics officer career field by separating the logistics function into two specialties.

According to Gen. Zettler, the dual-track concept splits the logistics career field into two separate specialties aligning aircraft maintenance, munitions and missile maintenance in one track and logistics plans, supply and transportation in another. The goal is to develop officers with a greater depth of experience.

A recent decision by Air Force major command leaders and CSAF approved the dual-track career field initiative by establishing a logistics readiness officer career field. Maintenance officers will continue with their career fields with limited cross over into the supply and transportation fields.

Reorganization

The decision also made a change in the structural organization of base wing operations. The standard wing organization will be reorganized to align the groups and squadrons with the Air Force core competencies, said Gen. John Jumper Air Force Chief of Staff.

The new organization will be comprised of an operations group organized to operate air and space weapons systems, a maintenance group organized to maintain these complex weapons systems, a mission support group organized to enhance direct mission support of our expeditionary, rapid reaction, contingency-based forces and a medical group which will not be reorganized, but will continue with its mission maintaining a fit and ready force, said Gen. Jumper.

"All wing maintenance functions will be organized under the newly formed maintenance group, while all wing supply, transportation, contracting and aerial port functions will be organized under the newly formed mission support group," Gen. Jumper said.

New management processes

Material management is another area of focus. The review recommended that wing-level material management processes be integrated under a single authority responsible for base-level supply and transportation functions.

"Combining the supply squadron with the transportation squadron will streamline processes and eliminate overlapping functions," Gen. Zettler said.

The decision also dealt with the streamlining process by combining the two squadrons to make up what will become the logistics readiness squadron, or LRS, which will become a part of the mission support group.

Contingency planning will become another area of change. Most wings have logistics plans functions located in the logistics support squadron or in the center or wing plans office. The review recommends standardization of logistics plans functions.

According to Gen. Zettler, MAJCOM commanders suggested two options for standardization. The first was aligning logistics plans functions under the logistics group, and the second would place these functions in wing plans.

Staff Sgt. Mike Leach, 654th Combat Logistics Support Squadron, Tinker AFB, Okla., repairs a B-52H flap track assembly. The new Chief of Staff Logistics Review is helping reorganize base level logistics processes to better meet customer need and improve readiness. (654th CLSS photo)

Contingency planning

Decision makers planned to resolve any contingency planning issues by bringing logistics plans functions into the logistics readiness squadron, causing plans to become interlinked with supply and transportation, according to a recent CSAF report.

Weapon system sortie production and fleet health are areas of concern in the review. The reorganization of the wing will provide more attention to both areas of readiness. Operations groups are concerned with production and launching weapon systems. Maintenance groups are concerned with overall fleet health of aircraft and other weapon systems under the new recommendations.

"The separation of operation's sortie production and fleet health will aid in the planning and maintenance schedules of airframes insuring a balance of preparedness for current and future EAF deployments," said Gen. Zettler.

Implementation plans

"Representatives from the headquarters staff and affected base units are working on AFMC's implementation plan for the CLR initiatives," said Lt. Col. Mark Douglas, chief of AFMC Supply Division.

Implementation at AFMC units will occur under a carefully planned and executed timetable defined by the Air Staff's Program Action Directive, or PAD. Under current guidance, units have been instructed to begin the standup of their new organizations no earlier than July 1, 2002 but not later than October 1, 2002 with a projected completion date of September 30, 2003.

"While the command's diversity of missions and organizations will make CLR implementation challenging at some locations, the opportunities for improved standardization, training and performance promise to make this a very rewarding effort," Col. Douglas said.

The CLR provides the opportunity for significant streamlining in logistics operations that are vital to AFMC's desire to improve agile combat support for America's warfighters, he said.

— 2nd Lt. Gailyn Whitman, AFMC Public Affairs

DMAPS provides an integrated suite of systems that assist depot maintenance operations and provide better production, material and financial information. Here, two Oklahoma City ALC, employees at Tinker AFB, Okla., input a work control document number into a portable wireless computer by scanning a barcode. (OC-ALC photo)

Transforming the way AFMC does business

Technological advances play a key role in transforming today's forces, and thanks to a new depot maintenance initiative, air logistic centers are streamlining the way they do business.

The innovative approach is called the Depot Maintenance Accounting and Production System — better known as DMAPS. This development not only fits neatly within Air Force Materiel Command's overall transformation strategy, but promises to make the air logistic centers more effective and efficient.

"DMAPS is an integrated suite of systems that will bolster management of the organic depot maintenance operations in the command ALCs," said Mr. Steve

DMAPS *continued on page 12*

DMAPS *continued from page 11*

Hannaford, DMAPS program manager. "These integrated systems provide better production, material and financial information, and in short, allow us to better support the warfighter."

Phase one of DMAPS has been implemented. This first step improves labor tracking and provides a better capability to manage work and related labor cost. Second phase efforts are currently under way at Ogden ALC, Hill Air Force Base, Utah. "This next phase will improve material management and provide better financial information for decisions and reporting," he said. "After implementation at Ogden, we plan phase two implementation at Warner-Robins ALC and then at Oklahoma City ALC."

More timely information

DMAPS will be working behind the scenes to provide customers in the operating commands more timely information and effective support. For example, the system provides an automated billing process enabling customers to more fully manage fund execution. Thanks to improved labor tracking, DMAPS will magnify detailed production results, and improve reaction to changes in workload to support customer requirements.

In addition, depot maintenance managers will be better able to control costs of depot maintenance operations. According to Mr. Hannaford, overhead, general and administrative cost will be applied on a planned dollar rate per direct hour instead of at the end of the month. This change from monthly to daily application of overhead produces more timely management review of cost variances and better figures for the customer.

DMAPS will also facilitate customer decision support by providing a repository for production and material data. To streamline the information systems architecture and simplify the sources of information, DMAPS will replace the functionality of several AFMC legacy systems.

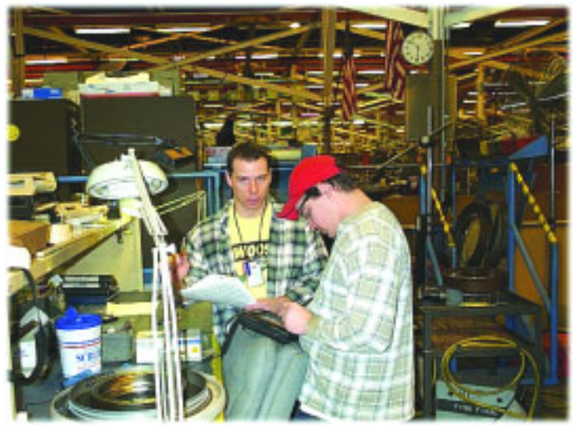
DMAPS will give maintenance managers better control of parts used in the repair process. Inventory will be managed specifically for depot maintenance and will be independent of the supply management area thanks to new automated ordering capability and materiel management systems. This change offers managers more influence over material availability and cost. The automated ordering capability provides a set of screens as the single point of entry for all production material ordering requisitioning and related processes, such as back order management.

The materiel management system becomes the organic depot maintenance record for all organic material orders, receipts, cancellations and order changes. This system also becomes the record for all material owned by organic depot maintenance, including floating stock management. The system provides information to the new accounting system to maintain actual material cost in a single source providing readily available information.

Improved reporting

"One of the main purposes of DMAPS is to improve financial record keeping and reporting for daily decisions and periodically through various financial reports," Mr. Hannaford said. DMAPS will provide the official accounting records for Air Force depot maintenance rather than in today's multiple systems."

The transaction-driven general ledger system implements the mandated U.S. Standard General Ledger for organic depot maintenance accounting. More compliant accounting and financial statements will exist per financial standards, such as the Chief



More than 9,000 workers at Tinker AFB, Okla., are being trained to use the DMAPS system. Here two workers are tracking work control documents that have their own control numbers converted into bar codes. (OC-ALC photo)

Financial Officer's Act and other legislation and regulations.

DMAPS will provide for actual hour accounting, assuring more complete compliance with cost accounting standards needed to assure the organic depots can compete for workload. For accurate financial reporting, inventory will be valued using the weighted average inventory pricing methodology, rather than the current latest acquisition price approach.

Effective planning

"Because DMAPS provides better information, the system inherently fosters more effective planning," Mr. Hannaford said. "For example, the integrated DMAPS suite can support implementation of advanced planning and scheduling, one of the logistics transformation initiatives."

The suite provides the single source of input for labor collection and provides for entry at the task level by the maintenance technicians. Labor and material data will be collected at the task level and provide for line item accountability and traceability to the source. Orders for all organic depot maintenance material will take place at the operation or task level where the material is consumed. Organic depot maintenance will have the capability to look at production cost at the task level on a daily basis.

The DMAPS program provides for training to several thousand users in depot maintenance for the DMAPS suite systems. These include mechanics, material technicians, budget analysts, cost accountants, supervisors, planners and others. In addition to training on the new systems, users get a comprehensive overview of the changing processes.

A team effort

"DMAPS has been a tremendous team effort by all the players," said Mr. Hannaford. "Thanks to a lot of hard work by many, many people, and support from senior leadership, we've come up with a new system that will allow us to provide even better support to the warfighter."

— Mr. Rich Eyermann, AFMC DMAPS Program Office

Production line for F-16 programmed depot maintenance at Ogden ALC, Hill AFB, Utah.

Depot maintenance strategic plan focuses on meeting customer needs

The Air Force hopes to complete deliberations on its Air Force Depot Maintenance long-term strategic plan and is preparing to release the plan to Congress later this summer.

The new depot plan will be a long range strategy to ensure depot maintenance will meet Air Force needs in the future, said Col. Sarah Smith, chief, Depot Maintenance Division, Air Force Materiel Command Directorate of Logistics.

Focus on competencies

In response to development of the Air Expeditionary Forces and continued support of deployed forces, the depot maintenance strategy intends to focus on the Air Force core competencies to meet the needs of its customers.

According to Col. Smith, the Air Force has formulated a vision to specifically address agile combat support to the warfighter. Agile combat support embodies a set of unique expeditionary competencies needed to rapidly project, sustain and re-deploy aerospace power around the globe, she said.

Vision for better support

The vision is to provide focused support to the warfighter through seamless, integrated use of both public and private sector industrial bases, Col. Smith said.

Partnering with the private sector to ensure capabilities which complement Air Force organic depot maintenance is key to the plan, she said.

Challenges to meet

The Air Force faces many challenges that this strategic plan will help meet. A couple of those challenges involve aging aircraft and an aging workforce.

The average age of Air Force aircraft is approximately 22 years.

Modernization programs have successfully extended the usefulness of many airframes. The aging aircraft present depot maintenance challenges in their complexity and archaic computer software language.

Aging aircraft

Older aircraft require more maintenance. They fail in different, sometimes unexpected ways, and often require longer times in depot repair than anticipated.

Skilled maintenance workers are needed more than ever, which brings up the other challenge, an aging workforce.

The draw-down of the 1990s lead to a steadily increasing average age for the command's civilian workforce and now more than half that workforce will be eligible for retirement within the next 5 years. That leaves the three depots challenged in their ability to meet readiness and surge capabilities, according to Col. Smith.

The depot maintenance strategy will address the future needs of manning and integration of new technologies to support aging aircraft and the newer airframes as well, she said.

Funding concerns

Funding requirements will be in the fiscal year 2004 Program Objective Memorandum, she said.

The new plan will facilitate the continuing transformation of the AL depot maintenance operations making the centers better able to support the warfigher anywhere and anytime in the world.

The Air Force and AFMC are committed to maintain a healthy, effective and efficient organic depot infrastructure that is ready and responsive with technology, advanced facilities and equipment and with a highly qualified workforce, said Col. Smith.

— 2nd Lt. Gailyn Whitman, AFMC Public Affairs

Depot Maintenance Reengineering and Transformation

Transforming the depot repair business

— Col. James Hoelscher
Chief of Staff, DMRT War Room
AFMC Directorate of Logistics

There is more than just a name change going on with DMRT at Air Force Materiel Command. Eventually the changes will touch nearly all parts of depot repair in the command, from organizational structure to training to computer systems, the review team will transform the depot repair process.

A name change

Formerly known as Depot Maintenance Review Team, the initials have now transformed into Depot Maintenance Reengineering and Transformation. The name change came out of the natural progression of an initial effort to review how depot maintenance is done.

DMRT began in July 2001 with a goal to improve depot maintenance support to the warfighter and to improve financial performance at the depots. Those goals remain unchanged. After an initial period of study to identify problems and develop initial solutions, the next step was authorized and the effort then transformed to its new name and began implementation planning.

Teamwork

The initial study identified more than 300 issues that were inhibiting depot maintenance performance. These were grouped into 40 major issues and assigned to eight focus teams.

Those focus teams are: Organizational structure, financial management, workforce, infrastructure, information technology, metrics, workload/production and material support.

Since DMRT reaches across the entire Air Force, not just AFMC, both leaders and team members come from throughout the Air Force. Two implementation offices provide the overall program management.

Organizational structure

At the Pentagon, Brig. Gen. (Sel.) Gary McCoy, special assistant to the deputy chief of staff for installations and logistics for DMRT heads the effort. At AFMC Headquarters Brig. Gen. Hank Taylor, deputy director for logistics operations, has set up a DMRT war room to integrate major initiatives, serve as a formal communication node and ensure the appropriate reviews, coordination and policies are in place for DMRT to succeed.

The organizational structure team is examining how to best organize the depots to optimize them and provide clear lines of accountability, responsibility and authority. The team expects to have an approved structure for the depots by the end of the current fiscal year.

Training and recruiting are the primary goals of the DMRT workforce team. The AFMC workforce is shrinking through retirements and competition from private industry for qualified workers. Here, Ms. Belinda Schantz, a sheet metal mechanic at the Oklahoma City Air Logistics Center, Tinker AFB, Okla., works on KC-135 bearing angles that go on the plane's engine struts. (Photo by Ms. Margo Wright, OC-ALC)

Financial management

The financial management team has identified seven major initiatives aimed at improving financial processes within depot maintenance.

These initiatives will make significant changes in how the depots plan and execute their budgets. Implementation of the initiatives will take place between this fiscal year and fiscal 2005.

Workforce shaping

Training and recruiting are the primary concerns of the workforce team. In an era of a workforce that is shrinking through retirements and with intense competition from private industry for qualified workers, recruiting the people needed in the depots is a challenge.

Continued training is essential to retain workers and keep their skills current with the latest technology. This team is working on a number of initiatives to be implemented over the next three years that address these issues.

Infrastructure improvements

The goal of the infrastructure team is providing well maintained, environmentally compliant, efficiently configured and properly equipped facilities to support the workloads assigned to the depots.

Initiatives to be implemented over the next three years will help modify existing facilities, purchase and install new equipment, maintain current facilities, repair and replace equipment. The team is also looking at ways to integrate new technologies and methods to improve efficiency and increase the output of the depots.

Information technology

The information technology team is focused on integrating, managing and optimizing information technology across depot maintenance.

The team has identified three major issues: the lack of a fully supported integrated strategy, the lack of user-oriented information technology systems that enhance depot productivity and the failure of systems to meet current user needs. Initiatives addressing these issues will be implemented over the next two years.

Metrics

The metrics team has established an initiative to standardize a set of warfighter-focused metrics that are balanced and related to strategic objectives. The goal is to make sure the metrics drive production and priority practices that provide the best possible support to the warfighters. The new metrics are expected to be implemented by the end of this calendar year.

Workload and production

The workload and production team is looking at ways to plan better for depot maintenance, to adjust quickly to changing workloads and determine depot maintenance requirements.

The team has developed an initiative to implement a standard process improvement strategy and standardized shop floor metrics that relate to the customer and the shop floor. This initiative is planned to be implemented by March of fiscal year 2003.

The organizational structure team of DMRT is examining how to organize the depots with clear lines of accountability, responsiblity and authority. At Warner Robins ALC, Robins AFB, Ga., a C-5 undergoes programed depot maintenance. (WR-ALC photo) Ogden ALC, Hill AFB, Utah, provides quality parts and services to equip, maintain and sustain operational forces. Here, Mr. Dennis Guse and Mr. Primo Delgado, aircraft mechanics from Hill's Landing Gear Divison, are disassembling a C-5 main landing gear. (OO-ALC photo)

Material support

The material support team looked at issues related to depot maintenance material requirements and their relationship with organizations such the Defense Logistics Agency and the Supply Management Mission Area.

Issues included the variability and unpredictability of requirements, current stock levels, Air Force policies and policies affecting the total acquisition cycle. After determining that most of the issues identified were already being studied by the ongoing Spares Campaign, started in February 2001, the initiatives were passed to that effort to avoid duplication.

Completion dates of DMRT-related initiatives in the Spares Campaign range from January 2003 through December 2007.

The Spares Campaign — warfighter-focused supply

Air Force Materiel Command logisticians proved once again that critical analysis and creative problem-solving can generate initiatives that make Air Force supply better, faster and cheaper, by pushing up the "Spares Campaign."

The campaign, an initiative to reshape supply activities, seeks to re-engineer supply processes, reverse negative supply trends, reduce unprogrammed bills, achieve the best mission capability possible and improve responsiveness to Expeditionary Air Forces operations.

Recommendations

When the Air Force transitioned to the EAF concept, the logistics support structure that enables it had to adapt as well, said Wing Commander Andy Gell, Royal Air Force, chief of AFMC's Supply Chain Management and Analysis Branch.

"The spares campaign is our attempt to find areas of supply that could be done better, always with that support-to-the-warfighter aim in mind," Wing Cmdr. Gell added. "The spares campaign came up with a huge list of recommendations, some of which clearly wouldn't bear any fruit, and some of which we thought the best use of scarce resources, because they bring good, early returns."

Warfighter support

Following the 2001 terrorist attacks, AFMC Logistics Directorate launched a much closer look at how to translate those early returns into warfighter capability.

"We started in September 2001, finding offices of primary responsibility, or OPR, for each of the recommendations, making sure they were the right subject matter experts, tasking them in a way to look at solutions and giving them ways of reporting in a format we could use and compare," Wing Cmdr. Gell said.

"To back that up, we get the OPRs together from time to time to make sure that they're not running in opposite directions, and to exploit any potential synergy that exists between them," he said. The campaign, a series of progressive steps, has both long- and short-term initiatives.

"We have many initiatives that are being worked with their own timelines," he said. "Some will come earlier, some will come later. For example, creating a weapons supply chain management system will show fruit as early as October of this year. It really is an ongoing process."

Gathering data

"Most of the metrics are gathered through information technology systems that we use to gather data together. I'm very pleased to say this year we've seen very positive trends," said Wing Cmdr. Gell.

With the spares campaign's customer-oriented leveling technique, or COLT, customer wait time has been greatly reduced in some cases.

The basic premise of COLT is to set stock levels to a level that reduces back-order and transit time and allows customers to take possession of parts they need to accomplish their mission, said Mr. Don Kringen, chief, AFMC Depot Supply Support.

"Overall, COLT implementation has been incredibly successful," he said. "Since Oct. 1, 2001, the average customer wait time for the command has improved by more than 60 percent."

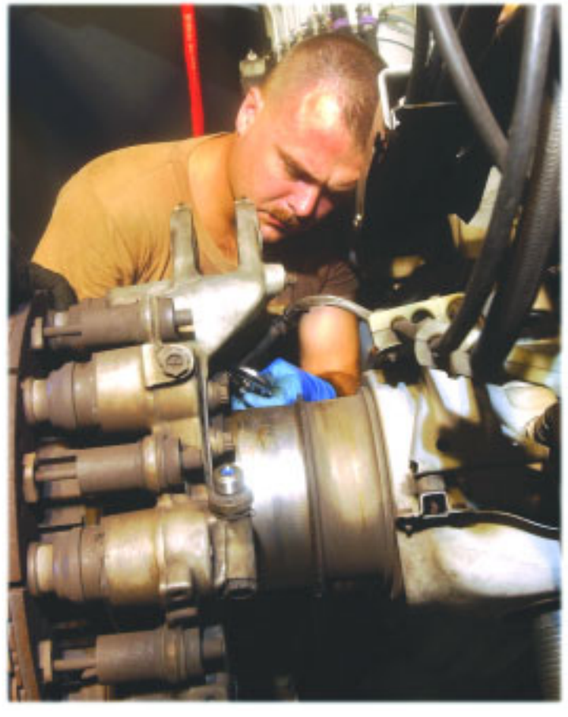
"Brig. Gen. Gabreski, director of logistics here, goes out on the road to our customers, the major commands, and gives them an update on what's going on here, focusing on how support, for them in particular, has been going," said Wing Cmdr. Gell.

"The MAJCOMs have been involved from the outset," he said. "We've had a constant relationship with the MAJCOMs, and that's very important.

"The spares campaign is led from the Air Staff, but AFMC now has the lion's share of the recommendations that are going forward," he said.

"It takes an awful lot of people — anyone whose basis is supply is concerned with the spares campaign," said Wing Cmdr. Gell. "There are a lot of people working very hard to make these changes. The Air Force isn't going to stand still, so the supply systems that support it can't stand still."

— Capt. Jeff Sandrock, AFMC Public Affairs



An Air Force crewchief replaces the brakes on a KC-10A Extender in support of Operation Enduring Freedom. AFMC's Spares Campaign is improving responsiveness to Expeditionary Air Force operations. (U.S. Air Force photy by Staff Sgt. Larry Simmons)

Wind tunnel improvements yield potential cost savings

ARNOLD AIR FORCE BASE, Tenn. — Arnold Engineering Development Center has completed verification testing of a new system, which will provide potential cost savings in the center's 16-foot transonic wind tunnel for future customers.

The successful completion of the captive trajectory support system air-on verification test is a significant milestone for AEDC. Test personnel have validated improvements and upgrades to the center's captive trajectory support test cart using 10-percent scale models of the B-2A Spirit Bomber and the MK-84/Joint Direct Attack Munition.

The captive trajectory support test cart is used for online trajectory analysis of air-launched stores and for measuring the aerodynamic influence of an aircraft flow field on a store in proximity to that aircraft.

The captive trajectory support is a computer-controlled, six-degree-of-freedom model positioning system. The six degrees of freedom are pitch, yaw, roll, vertical, axial and horizontal motions.

— Information provided by AEDC Public Affair

Robins unveils monument for C-23 crash victims

ROBINS AIR FORCE BASE, Ga. — Robins recently unveiled a monument honoring the 21 military members killed when a C-23 Sherpa they were riding in crashed in Unadilla.

Maj. Gen. Donald Wetekam, commander of the Warner Robins Air Logistics Center, headed up the Robins delegation of military and civilian personnel participating in the ceremony. Families of the victims and members of the home units attended.

The monument is alongside a road at a location from which the major portion of the airplane crashed. Robins' search and recovery teams used the road to reach the site. A map on the back of the monument marks the site of the main wreckage.

The accident marked the greatest loss of life in an airplane crash in Georgia's history, and triggered a major search and recovery mission that involved hundreds of Robins' military and civilian personnel.

First Lt. Shelley Hoenle of the 78th Civil Engineer Group designed the monument. Her design earned her a spot on a team that designed a millennium gate for Washington, D.C.

— Information provided by WR-ALC Public Affairs

Photo by Tech. Sgt. Christopher Ball

Wanna Race?

EDWARDS AIR FORCE BASE, Calif. — A NASCAR Wood Brothers stock car recently visited Edwards Air Force Base, Calif., for a photo session with the F-22 Raptor, which is undergoing flight testing at Edwards.

The stop is part of the Air Force's ongoing partnership with the National Association of Stock Car Auto Racing aimed at recruiting young fans of motor sports racing. The car was making its way from Las Vegas, where it was on display during a recent Winston Cup Series race, to Los Angeles, where it will make several appearances at LA-area schools. The Air Force has advertised on the No. 21 car, driven by Mr. Elliott Sadler, since the start of the 2001 racing season.

— Information provided by AFFTC Public Affairs

New portal to be C2 enterprise integration window

HANSCOM AIR FORCE BASE, Mass. — The Electronic Systems Center is developing a web-based information system designed to let managers track the progress of individual command and control, or C2, systems, and the entire C2 enterprise.

The C2 enterprise is made up of all the systems that gather, synthesize and deliver data commanders need to make critical battle decisions.

The new system uses portal technology to enable coordinated planning and execution of C2 acquisition and development. A portal is a web-based information technology gateway allowing access to various information sources. Unlike a simple website, it permits registered users to do more than view material; it allows them to add, manipulate, cross-reference and view data in myriad ways.

Currently, the C2 enterprise portal has three fundamental functions: it captures and displays program and interoperability metrics; it tracks and displays enterprise-level calendar items; and it serves as a repository for detailed program schedules and documents that support C2 enterprise integration.

— Information provided by ESC Public Affairs

Tinker celebrates 60th anniversary

TINKER AIR FORCE BASE, Okla. — Tinker turned 60 years old March 1, but officials here made it clear the base could not have thrived and survived like it has without the support of its community partners. To commemorate the milestone, Tinker hosted a ceremony to thank those partially responsible for the base's success over the years. Base and community leaders unveiled a monument to mark the occasion.

Approximately 100 community and education leaders and Tinker officials attended the ceremony including Oklahoma City Air Logistics Center Vice Commander Brig. Gen. Loren Reno, Oklahoma City Chamber of Commerce president Mr. Richard Burpee and State Sen. Dave Herbert.

— Information provided by OC-ALC Public Affairs

The first CV-22 to call Edwards AFB, Calif., home hovers for a landing in the summer of 2000. (Photo by Mr. Dennis Taylor, AFFTC)

CV-22 test team prepares for return to flight

A diverse team of flight test experts at Edwards Air Force Base, Calif., are working toward a common goal — returning the Air Force version of the V-22 Osprey to flight this summer.

Pilots from the test and operational worlds, along with a cadre of handpicked engineers and mechanics, are preparing the CV-22 to resume flight-testing at Edwards in July. Flight tests of the Air Force version were halted after a December 2000 crash of the V-22 grounded the entire Osprey fleet.

Resuming development

Since that time, the integrated test force at Edwards has been working to correct those deficiencies in the aircraft that were identified through a Marine Corps operational evaluation and the Defense Department's blue ribbon panel of experts. The secretary of defense formed the independent panel of defense and industry experts after the December 2000 crash to evaluate whether the program should go forward and if so what deficiencies needed to be corrected.

Today, the CV-22 test team is set to resume the engineering, manufacturing and development phase of the CV-22 acquisition program. Before the flight-test program resumes, the test team will perform the necessary flight checks to wring out the aircraft and ensure all maintenance actions taken were performed properly.

Testing for specifics

Testing will pick up where it left off in 2000 with an emphasis on the aircraft's radar capabilities, said Maj. Todd Lovell, commander of the 18th Flight Test Squadron's Detachment 1 at Edwards. The 18th FLTS is a special operations test squadron based at Hurlburt Field, Fla. Maj. Lovell and his team are working with the Air Force Operational Test and Evaluation Center's Detachment 5 and the 418th Flight Test Squadron, both at Edwards.

"Because the aircraft hasn't flown since late 2000, we will have two initial shake-down flights," Maj. Lovell said. "After that, we will resume developmental testing with a goal of moving the program towards operational tests scheduled for 2006."

Once testing resumes, Maj. Lovell said the CV-22 team will focus on electronic counter measure and terrain-following tests. The operational pilot added that Edwards is the perfect location to conduct CV-22 flight-testing because the ranges are already set up for terrain-following testing and they are in close proximity to the Western Test Range and the Navy's China Lake test ranges.

In the meantime, CV-22 mechanics and engineers at Edwards continue to correct the deficiencies outlined by the Defense Department.

Fixing problems

According to Tech. Sgt. John Lysaght, a structural mechanic with the CV-22 test force at Edwards, much of the test team's work is focused on tubing and wires that were positioned too closely to other materials in the aircraft. The close proximity of the wires eventually led to chaffing. Mechanics working on the two test aircraft at Edwards have been changing the routing and placement of the wires to create a free zone around them, Sgt. Lysaght said.

He added the down time has given the mechanics working on the CV-22 a unique opportunity to provide input.

"We know this aircraft more intimately because we've been involved in improving the design aspects from day one," Sgt. Lysaght said. "We are getting in there and getting things changed. This results in better tech data for the crews who will be maintaining this aircraft and it means a safer aircraft for those who will be flying it."

Sgt. Lysaght said the challenge once flying resumes this summer will be to maintain the aircraft on a daily basis.

"Right now we are in a reengineering effort and are working from blueprints instead of the tech data that we use to maintain the aircraft and generate sorties every day," he said. "I have no doubt this is something we can overcome."

Part of the solution is the experience each of the test force's 60 maintainers brings to the fight.

Experience works

Staff Sgt. David Stephens, a tiltrotor journeymen working on the CV-22, notes that everyone working around him in the Osprey hangar has been "handpicked."

The tour is a special duty assignment and most of the mechanics working on the re-design of the CV-22 at Edwards have extensive helicopter experience. Until recently, the lowest ranking enlisted member on the CV-22 floor was a staff sergeant.

"This aircraft is unique in that it flies like an airplane but takes off like a helicopter," said Sgt. Stephens who maintained MH-53Js at his last assignment at Kirtland AFB, N.M. "I've worked with several of the crewchiefs here while stationed at other bases and now we are all working together again to make this a better aircraft."

Like the pilots and flight engineers assigned to the CV-22, the maintainers come from an array of operational and flight test backgrounds. In addition, about 20 contractors from Bell and Boeing also support the integrated test force. All work to support the V-22 Osprey System Program Office at Naval Air Station, Patuxant River, Md.

Into the future

The Air Force has plans to acquire 50 CV-22 Ospreys to replace its fleet of MH-53J Pave Low helicopters used to insert and extract special operations forces from hostile areas. The first production aircraft are slated to the 58th Training Squadron at Kirtland AFB, N.M., where they will be used for CV-22 advanced aircrew training.

The CV-22 Osprey is a tiltrotor aircraft that combines the vertical takeoff, hover and vertical landing qualities of a helicopter with the long-range, fuel efficiency and speed characteristics of a turboprop aircraft.

— Ms. Leigh Anne Bierstine, AFFTC Public Affairs

AFRL huddles over Hubble trouble

If your 35mm camera goes on the blink, almost any photo repair shop in town can fix it in a few days. But when the lifetime of a highly specialized camera mounted on a research instrument aboard NASA's Hubble Space Telescope known as the Near Infrared Camera and Multi-Object Spectrometer, or NICMOS, was threatened, technology developed in part by the Air Force Research Laboratory's Space Vehicles Directorate, was installed on the Hubble in March 2002.

Closer look

Heat-detecting infrared NICMOS sensors "see" light at very great distances, and by operating in the infrared, NICMOS can look much deeper into the clouds of dust that block normal telescope observations.

When the life of a specialized camera aboard the Hubble Space Telescope was threatened, NASA relied on technology developed in part by AFRL to extend the it's life. (NASA photo)

But heat in Hubble's interior produced by the routine workings of tightly compacted electronics such as computers and batteries had impaired sensor sensitivity and performance by degrading the temperature contrast needed between the sensor and its immediate background.

Consequently, the area surrounding the sensors must be cooled to about 200 degrees below zero Centigrade. It is this cold background that heightens the sensor's ability to detect faint light sources through their heat signatures or spectral "fingerprints."

Extending life

Heat had leaked into a solid-nitrogen cooler known as a Dewar and melted the nitrogen faster than NASA had planned. The 4.6-year NICMOS mission would be shortened to only 1.6 years unless additional refrigeration is provided.

The Space Vehicles Directorate participated in the development of a Turbo Reverse Brayton Cryocooler, which helps NASA return the NICMOS camera to its optimum operating temperature. The directorate supports ground test activities and provides cryocooler expertise to help define and accomplish the repair mission. The new cooler is expected to lengthen NICMOS' operational lifetime by a factor of at least two.

Over time, AFRL has made important contributions in the field of cryocooling for space systems and their sensors. This is especially significant for the warfighter of today and tomorrow.

Since the Gulf War, they have become increasingly dependent on reliable space-based assets for information crucial to assessing tactical as well as strategic contingencies.

NASA's repair of the Hubble Space Telescope, aided by AFRL technological investments, is a real opportunity to demonstrate the pay-off of crucial Air Force technologies as they relate to space and the nation's defense.

AFRL, the Air Force center for space science and technology, teamed with NASA and other organizations on repair.

Working contractually with Creare, Inc., of Hanover, N.H., NASA's Goddard Space Flight Center used technology developed by funds from the Missile Defense Agency and NASA.

Unimpeded by the earth's atmospheric interference like ground-based telescopes, the orbiting Hubble Space Telescope obtains extremely clear images of celestial objects and distant solar systems.

— Mr. John Brownlee, AFRL Public Affairs

'SPO scope' enhances downed aviator's night vision, navigation

No longer will downed Air Force pilots grope their way in the dark behind enemy lines in hopes of avoiding capture. Thanks to a new night vision device that the 311th Human Systems Program Office at Brooks Air Froce Base, Texas, has tested and evaluated, aviators' chances for survival in the murkiness of nighttime contingency operations has been greatly enhanced.

Interim safe-to-fly

The Evader's Night Vision Imaging System became part of Air Combat Command aircrew survival vest ensembles following the 311th SPO's interim safe-to-fly recommendation issued shortly after the Sept. 11 terrorist attacks.

"Mr. Scott O'Grady couldn't see his rescuers," said Maj. Al Gracia, referring to the downed Air Force pilot's 1994 ordeal in Bosnia that magnified certain search and survival technological deficiencies that have since been addressed. Before the night vision imaging system, downed Air Force pilots had been without a survival night vision device. Maj. Gracia's Warfighter Requirements and New Technologies Integrated Product Team became involved in assessing the system, a commercial off-the-shelf device, due to an urgent ACC request. "An F-117 pilot, shot down over Kosovo in 1999, during a post-rescue debriefing identified some big deficiencies: the ability to evade the enemy and see rescuers at night," Maj. Gracia said.

According to Col. John Snider, commander of the 49th Operations Support Squadron at Hollomon AFB, N.M., the downed pilot from his command prompted a recommendation to ACC headquarters to investigate adopting a small, portable night vision monocular device that can be packed inside an SRU-21/P survival vest during combat missions.

In a memorandum to ACC headquarters, Col. Snider wrote, "This device would greatly increase the downed pilot's ability to assess the enemy threat, aid in the pilot's ability to evade the enemy at night, provide an additional covert directional signal, increase their chances of survival and improve their chances of rescue."

"ACC contacted us in early 2001, recommending this device and their requirements. Once we got the requirements, we identified and coordinated tests to evaluate the device," said Mr. Richard Rousett, 311th SPO product team requirements program manager.

Evader's Night Vision Imaging System helps downed pilots see in the dark and easily fits on a survival vest. (Photo by Mr. Rudy Purificato, 311th HSW)

Powerful and compact

ACC wanted the multi-purpose vision system, produced by the Emmaus, Pennsylvania-based Night Vision Equipment Company evaluated. The company claims this is the only night vision system in the world designed specifically to meet survival, evasion, resistance and escape military requirements. Operating on two double-A batteries, the night scope is smaller than most survival radios. It weighs less than 15 ounces, uses infrared imaging technology and features both a compass module and a covert signaling capability.

Mr. Al Gonzalez, contractor for Core6 Solutions, said the device passed a series of rapid decompression, windblast and sled tests. ACC headquarters was subsequently granted an interim safe-to-fly approval for the night vision scope for one year. The recommendation, issued in October, allows it to be used on all combat Air Force and Air Ace survival vests for contingency operations only. "In the future, we're looking at full safe-to-fly certification that will allow its permanent use on life support ensembles," Maj. Garcia said.

— Mr. Rudy Purificato, 311th Human System Wing

Mr. John Sullivan, a pneudraulic systems mechanic with AMARC, removes a ski from an LC-130 Hercules to replace a wheel bearing as the aircraft is prepared to re-enter active service. (Photo by Tech. Sgt. B. Coors-Davidson, AMARC)

Aircraft resurrected for third life

More than 21 years after crashing in the Antarctic tundra, an LC-130 Hercules is being called back to active duty.

The aircraft spent more than 17 years buried in snow and ice in Antarctica, then spent the last three years in the Arizona desert at the Aerospace Maintenance and Regeneration Center, Davis Monthan Air Force Base, Ariz. Now, under the watchful eyes of the AMARC crew, it is prepared to fly again.

Ski-equipped LC-130 aircraft are the backbone of Operation Deep Freeze, a joint military operation of the U.S. Armed Forces and the New Zealand Defense Forces providing logistic support for the U.S. National Science Foundation's Antarctic program. Previously under naval control, the New York Air National Guard's 109th Airlift Wing assumed authority for all LC-130s in March 1999.

A failed takeoff

Built in 1959, this LC-130 was stationed at McMurdo Station, Antarctica. On Dec. 4, 1971, the aircraft was at a small strip 750 miles from home when the pilot attempted a jet-assisted takeoff, using rockets to give the aircraft the speed it needed.

At about 50 feet off the ground, two of the rockets broke off and hit an engine. The propeller was torn off, another engine was damaged and debris ripped holes in the fuselage, said Senior Chief Petty Officer Frank Brooks, the Navy's quality assurance and maintenance chief at the AMARC.

"The Hercules crashed in the barren, icy landscape and was seriously damaged, but miraculously, the 10-man crew escaped unharmed," Chief Brooks said.

Foul weather prevented a team from reaching the crew for more than three days. The crew was eventually rescued, but the National Science Foundation, or NSF, officials determined it would not be cost-effective to salvage the plane.

The elements quickly claimed the damaged bird, covering it in snow and ice for nearly two decades.

LC-130 'on ice'

In 1989, the foundation needed another LC-130. A cost analysis and a few mechanics and pilots determined that the cost of resurrecting the lost LC-130 would be about $10 million, compared to more than $30 million for a new aircraft.

Soon, a crew was on-site to excavate the frozen plane and begin breathing life back into it. Two months later the plane flew out and re-entered service for the science foundation.

In 1999, the aircraft left its frozen home and was retired to a warmer climate at AMARC, a 2,600-acre open-air warehouse for 4,500 aircraft valued at $27 billion. Now the plane will be used to fly transport missions at Naval Air Station, Point Mugu, Calif., Chief Brooks said. AMARC crews inspected and prepared the aircraft for a test flight in early March.

Many aircraft are stored at AMARC so they can be returned to flying status.

— Tech. Sgt. B. Coors-Davidson, 355th Wing Public Affairs

Maintaining B-52s — a family affair at Tinker

When Mr. Randall Sneed joined the B-52 work force at Tinker Air Force Base, Okla., seven years ago, he said it felt like he was "coming home."

After all, he had practically grown up in the shadow of the hulking plane that his father, Mr. John Sneed, devoted more than 39 years of his life to maintain.

It's getting easier

Now, it was his turn to take on the responsibility of keeping the Air Force's longest flying bomber aloft.

"It was tough at first," he said, "because when I first came over here in 1995, some of the guys would say, 'we do things this way because John Sneed said.' There was some pressure at first to follow in his footsteps, but it's gotten better over the years."

Following a career path similar to your father's isn't always easy, especially when your father worked on the first B-52 Stratofortress that landed at Tinker and helped mold the B-52 maintenance crew into what it is today. But, the young Mr. Sneed accepted the challenge and has never looked back.

"I feel like I have been a B-52 person all my life," he said. "The thing that makes it so successful is the people. They take care of each other and do a great job."

A family affair

Mr. Sneed said family ties run deep throughout the B-52 community, like the lifeblood that has kept bomber maintenance on track for generations.

"I've got several men who work for me whose sons work in sheet metal in B-52s and there are two other guys who work for me whose dads just retired in scheduling. There are numerous examples like that throughout the B-52 community," he said.

Mr. Sneed came to Tinker in 1980 and worked in aircraft nondestructive inspection and blade repair before joining the B-52 team. He said growing up, his dad would always come home and tell him interesting stories about the massive bomber.

"My family has always been about protecting our freedom and the American way of life," he said. "When dad would tell me stories about how maintaining the B-52 was one way of safeguarding the United States against the spread of communism, I knew I had to someday do my part."

When Mr. Sneed had a chance to become part of the legendary work force he heard so much about, he didn't hesitate. "The people in B-52s just seemed to have it together," he said. "I guess that's why we have a 99 percent on-time delivery rate to the customer. We're a close-knit family here and people take a lot of pride in their work."

Back to the future

That same pride was evident when his father joined the work force at Tinker on April 20, 1951.

"We also had a 99 percent on-time delivery rate when I was here," the elder Mr. Sneed said. "We had to keep up with the demand.

"The only difference is now they have more computers and high-tech gadgets. When I hired on, we had 8,000 to 9,000 civilians. Now, there's over 24,000 military and civilian combined."

Although the plane hasn't changed much and the work force is still devoted to their craft, computers have revolutionized the entire maintenance process.

"Flow charts used to be hung on the wall by each aircraft," he said. "Some charts still hang on the wall, but most of the progress is charted on computer these days."

It was impressive

Recalling the first "monster" that landed for depot maintenance in 1959, the elder Mr. Sneed said he was honored to have been handpicked to work on the bomber.

"If you've ever seen a B-52 land or take off, it's pretty impressive," he said. "Back then, you had to stand at the end of the runway and signal to the pilot as this giant lifted off."

He said the first modification on the B-52 required workers to install more than 250 black boxes on each of the aircraft. "We performed a series of modifications including the 812 series, which entailed putting together a bunch of kits with replacement parts.

"We struggled initially, because we couldn't punch things into a computer like they do now," he said. "But, we worked through it. Back then, during the Cold War, we had planes coming in and going out of here all the time."

"When dad was here during the Vietnam War, there were about 500 people in the electric unit where he worked," the young Mr. Sneed said. "Now, there are about 350 in the whole section. They were installing a lot more modifications at that time."

Mr. Randall Sneed and his father, Mr. John Sneed, are following similiar career paths at Tinker AFB, Okla. Both have been heavily involved in maintenance of the B-52 Stratofortress during the past 50 years. (Photo by Ms. Margo Wright)

He said the pace is still frantic today and his crews continue to meet the demanding schedule, with more than 1,550 B-52s having been overhauled during its illustrious 40-plus year history at the depot.

"I was proud to see Randall follow in my footsteps," his father said. He still stops by the B-52 area every now and then to visit his son and is treated like royalty. Perhaps it's because he's as much a part of the B-52 history as the B-52 itself.

As for the young Mr. Sneed, he is carving his own niche in the bomber's history. From Vietnam to Operation Enduring Freedom, the father and son team is proud to say they've done their best to support the warfighter as the B-52 celebrated the 50th anniversary of its first flight April 15.

— Mr. Darren Heusel, OC-ALC Public Affairs

B-52 turns 50

It's not getting older — it's getting better

The tried and true workhorse of the U.S. Air Force heavy bomber fleet, the Boeing B-52 Stratofortress, turned 50 years old April 15.

Although originally designed to penetrate the Soviet Union and drop nuclear bombs, the B-52 has served in a variety of conventional bombing roles in Vietnam, Iraq, Kosovo and most recently in Afghanistan.

Though some of the aircraft are crewed today by sons, grandsons, daughters and granddaughters of the first B-52 aircrews, the Air Force plans to continue using the bomber until 2037. The Air Force and Boeing have continually updated the B-52 with new avionics, data-link communications defense systems and precision-guided weapons capabilities and are considering new fuel-efficient turbofan engines for the eight-engine jets.

The B-52 is the only U.S. aircraft capable of delivering long-range AGM-86C conventional air launched cruise missiles and AGM-142 have nap missiles, and is the only platform capable of delivering the AGM-84D Harpoon anti-ship cruise missile. Called "standoff weapons," cruise missiles enhance aircraft survivability by allowing the aircraft to fly outside the range of enemy defenses and launch missiles from a safe distance.

Also, the B-52 drops laser-guided weapons, inertial navigation system weapons and weapons guided by Global Positioning Satellites including the newest Joint Direct Attack Munition used extensively in the Afghanistan air campaign.

In 2001, the B-52 had the highest mission capable rate of the more than 1,000 fighters and bombers in Air Combat Command. This means that the B-52 was ready to fly and fight and was hampered less by maintenance concerns than any other aircraft in the command.

The first prototype of the bomber was designated the YB-52 and flew its first flight on April 15, 1952. After extensive test and evaluation the bomber was put into production and the first production line B-52A flew in 1954. The last production line B-52H was delivered in October 1962. Only the H model is still in the Air Force inventory.

The H model can carry up to 20 nuclear or conventional air launched cruise missiles. B-52s launched conventional cruise missiles in several worldwide operations during the 1990s including Operation Desert Storm and Operation Allied Force in Kosovo. B-52s provide the only nuclear option that deters nuclear attacks from hostile nations but can be recalled after launch.

— Eighth Air Force Office of Public Affairs

AFMC general helped introduce first female cadets to acadamy

More than 25 years ago, the Air Force Academy opened its doors to a new era in service history when the first cadre of female cadets crossed into the blue. There to help them maneuver through uncharted territory was then 2nd Lt. Terry Walter, who is known today as Brig. Gen. Gabreski, Air Force Materiel Command Director of Logistics.

While in her earlier role, Gen. Gabreski, a major general select, served as one of 15 air training officers, known as ATOs. These officers served as role models and surrogate upperclassmen to the new female cadets when the Academy opened its doors to female cadets in 1976 as members of the class of 1980.

Today, Gen. Gabreski is the last remaining air training officer on active duty, and she feels it's important to look back on the role of women in the military.

Looking back

The academy prepared for the integration of women cadets by dusting off a plan from 1955 when the academy first opened its doors. The plan was to use commissioned officers to act as air training officers or surrogate upperclassmen for incoming cadets.

According to Gen. Gabreski, a significant number of female junior officers applied for the ATO positions to support the female cadets of the class of 1980.

Starting over

The new ATOs began a rigorous training program in mid-January to learn the ins and outs of academy life. All but one of the ATOs had their hair cut short and all were stripped of traditional aspects of customs and courtesies. The only indication of their officership that remained was their lieutenant's bars.

The training program lasted nearly six months and encompassed most of the training the new cadets in the class of 1980 would see over the next four years. They began with basic cadet training where their instructors were first and second class cadets.

In a 1976 interview for Airman Magazine, then 2nd. Lt. Walter said, "Once they got over the fact we were officers and girls too, they realized all they were supposed to do was train us as cadets. And they did it. They yelled at us, braced us against the walls, and made us 'know knowledge' (recite basic Air Force knowledge), just like we were basic cadets."

Acceptable behavior

Looking back at her time as an ATO, the general said, "Our job as ATOs was more than just surrogate upperclassmen for the female cadets. We were there to help the upper class cadets learn to train female cadets."

Gen. Gabreski recalls a cadet asking how to handle a female cadet crying. She told the cadet to handle it the same way he would have with a man, "Tell her it's not acceptable behavior."

Brig. Gen. Terry Gabreski, Air Force Materiel Command Director of Logistics, was one of the first Air Force Academy air training officers who mentored the first female cadets at the Air Force Academy in Colorado. (Photo by 2nd Lt. Gailyn Whitman, AFMC)

The new ATOs learned survival, evasion, resistance and escape training as well as cadet wing orientation. The orientation involved assuming roles of upper class and lower class cadets, physical conditioning, various airmanship programs, field training at Jack's Valley and auditing academic courses.

Special counseling courses enabled the ATOs to assist women cadets with potential personal problems, the general said.

"We weren't there to be house mothers to these women. We were there to teach them how to be good cadets and become good Air Force officers," she said.

The ATOs were watched closely during training by academy staff. "They wanted to see if we could keep up, and give us a piece of the academy experience" said Gen. Gabreski.

Another perspective

Lt. Gen. Charles Coolidge Jr., AFMC Vice Commander, worked as a physics instructor in 1976 when women first entered the academy.

He recalls working with the ATOs, especially in 1977 when he took command of the cadet parachute program.

Gen. Coolidge was responsible for redesigning the jump harness to accommodate a woman's frame, and he worked closely with the younger Gen. Gabreski. She, along with several other ATOs, participated in the parachute program to help integrate women into the program.

Very impressive

As a result, Gen. Gabreski was the first Air Force woman to receive her jump wings in the academy jump program after completing the required five jumps.

He recalls being "impressed by the job the ATOs did. Their success was evident in the low attrition rate and continued success of the women of the class of 1980," he said.

Gen. Gabreski remained at the academy until September 1977 when she returned to her job as an aircraft maintenance officer at Shaw AFB, N.C.

New opportunities

She said her time at the academy gave her many opportunities she would not have gotten otherwise, and she's happy she helped normalize the presence of women at the Air Force Academy.

The class of 1980 began with 156 women. At the end of the first semester the female cadets showed an eight percent attrition from the program which compared favorably with 10.9 percent for males.

Since the initial entry of women to the Academy, 2,480 women have graduated and joined the ranks of Air Force officers. Their jobs are far-ranging now, since the restriction on combat roles has been lifted. There are female officers in almost every field of service from public affairs to astronauts, fighter pilots to maintenance officers.

The future for women in the Air Force is defined by their capabilities and hard work, said Gen. Gabreski.

"I am proud to have taken a role in shaping what the Academy is today," she said.

— 2nd Lt. Gailyn F. Whitman, AFMC Public Affairs

In 1976, then Lt. Terry Walter, now Brig. Gen. Terry Gabreski (second from left), and the other Air Force Academy air training officers practice the art of drill and ceremony. Today Gabreski is the director of logistics at Air Force Materiel Command. (Courtesy photo)

Quick thinking saves life

Ever imagine how you might react in an emergency? Lt. Col. Rudy Abeyta of Kirtland Air Force Base, N.M., Phillips Research Site, can now check that task off his personal list of "things to wonder about."

Recently driving at night with his family, the twenty-two-year Air Force veteran unexpectedly donned the sudden yet unwanted role of hero.

"I noticed the cars ahead of me suddenly start hitting their brakes and swerving all over the freeway," he said. "As I slowed down, I saw debris spread across the road. Tennis shoes, clothing and car parts were strewn everywhere."

Lt. Col. Rudy Abeyta

A Camaro preceding his car had slammed into the rear of a flatbed trailer loaded with a pick-up truck being towed along Interstate 25 south of Santa Fe, creating the perilous situation for southbound motorists. The Camaro had become jammed beneath the trailer and both vehicles slid across the freeway.

As Col. Abeyta gradually negotiated his way through the scattering vehicles, he noticed a car catch fire on the opposite side of the interstate's median strip.

"I pulled into the center divider, jumped out and ran across the northbound lanes," he said. "The engine compartment of the Camaro that had rammed into the trailer was now fully involved in flames and I could see the driver slumped over the steering wheel, apparently unconscious."

Col. Abeyta said he was concerned for his safety, but knew that he had to help. "I thought there was a very good chance the car would blow up any second."

Another motorist had run over to help him and, together, they opened the car door, freed the driver's seat belt and dragged the injured man to safety.

"He seemed badly hurt," Col. Abeyta said. "Seconds later, the entire car was fully engulfed in flames. I thought the car was going to explode, so we dragged the unconscious driver away even farther."

Then he confirmed that someone had already summoned paramedics and police.

"When I got back into my car, my wife said, 'you didn't go into that car, did you?' When I said that we had to get the man out, she said, 'Rudy, that car could have blown up.' I told her that I hoped someone else would have done it for us had we been trapped like that guy."

Col. Abeyta called the hospital the next day and learned that no one had died in the accident.

Set to retire from the Air Force this summer and move to Taos, Col. Abeyta plans to work in real estate, become a part-time construction contractor, and if time permits, teach at the University of New Mexico branch at Taos. He is currently the Chief of the Corporate Information Office for Phillips Research Site and oversees management information systems, communications and a technical library.

— Mr. John Brownlee, AFRL Public Affairs

Capt. Lynette Gawell, 412th Operations Group navigator evaluator, conducts an annual check ride on Maj. Jon Haser, 370th Flight Test Squadron evaluator and research navigator. (Photo by Master Sgt. Anne Ward, AFFTC)

Following in her father's bootsteps

Ever since Capt. Lynnette Gawell was a blue-eyed, blonde-haired 11-year-old girl with a pixie haircut and glasses, she knew exactly what she wanted to do with her life — be a navigator, just like her dad.

Now Capt. Gawell, of the 412th Operations Group, is the only female C-135 navigator at Edwards Air Force Base, Calif.

Surrounded by a military family, she grew up traveling around the world. Her father, a 20-year Air Force veteran, was a KB-50 and C-130 navigator who graduated from the first Air Force officer training course at Lackland AFB, Texas in 1959. Her uncle also was in the Air Force, along with two of her brothers and one cousin who went into the Army.

Following her dreams

It was in her blood. She knew she wanted to follow in their bootsteps — and she knew that she wanted to fly.

"I grew up hearing the 'war' stories," she said. "My dad's stories were so inspirational. As my brothers and I grew older, we all decided to go into the military. My parents always encouraged us to follow our dreams and to get as much education as possible."

Her father, who finished his career teaching the Reserve Officer Training Course at South Dakota State University, encouraged her to apply to all the military academies. She was accepted to the U. S. Air Force Academy in 1987.

A new merger

Capt. Gawell met her husband, Capt. Andy Freeborn, 418th Flight Test Squadron, at the academy and was married there in the chapel three days after her graduation from navigator school.

Their careers mirrored each other. They both flew the KC-135 — at times going in opposite directions, and other times serving in the same squadron. She said she and her husband have worked hard to stay together, but it didn't work out until they finished flight training.

Coming together

"We finally worked an assignment together to go to Kadena Air Base, Okinawa, Japan, in 1994, and arrived there on her second anniversary," she said. After being stationed at three bases around the world, she followed her husband to Edwards in March 2001 while he attended the U. S. Air Force Test Pilot School to become a C-135 test pilot.

Capt. Gawell's plan is to make a career of the Air Force.

She says she considers herself lucky to be able to merge her professional and personal goals — she's been happily married for 10 years.

"You have to be able to compromise, in any situation," she said, arms folded and standing tall in her slim green flight suit. "I've had the best time of my life and a lot of fun flying. I am doing what I always wanted to."

Satisfaction guaranteed

She occasionally speaks to students by phone or at home in Texas and has advice for those looking toward a career.

"See the world and choose what makes you happy," she said. "Look at your goals, be reasonable and market your talents. If you make a million dollars, but you are away from your family too much, what good is it?

"I've been lucky to be an Air Force navigator. It's been interesting and challenging. I've had the camaraderie of the military family, the chance to live overseas — see many interesting places and meet wonderful people. I've lived my dreams and followed in my fathers footsteps."

— Master Sgt. Anne Ward, AFFTC Public Affairs

Mr. Philip Harvey

AFFTC meteorologist wins Air Force award

EDWARDS AIR FORCE BASE, Calif. — Mr. Philip Harvey, 412th Operations Support Squadron Weather Flight staff meteorologist recently won the Air Force 2001 Best Award. The award, named for Brig. Gen. William Best Jr., commander of Air Weather Service from 1970 to 1973, recognizes individual excellence by a member who provides aerospace weather staff support at the squadron level or higher.

Mr. Harvey manages the upper air site balloon launch facility, and he recently obtained a new Global Positioning System-based weather balloon tracking system to replace the older one used since 1990.

— Information provided by AFFTC Public Affairs

Tinker teen named state 'Youth of the Year'

TINKER AIR FORCE BASE, Okla. — A Tinker teen recently won the Oklahoma Boys and Girls Club Youth of the Year title. The award was presented to Mr. Michael Goodman by Gov. Frank Keating. Mr. Goodman also received a $1,000 Presidential Scholarship.

He travels to Fort Worth, Texas, this month to compete for the Southwest Region title against winners from Colorado, Kansas, Texas, New Mexico, Montana and Arkansas.

— Information provided by OC-ALC Public Affairs

Edwards civilian maintainer named best in Air Force

EDWARDS AIR FORCE BASE, Calif. — Mr. Lennis Ben, weapons expediter for the 416th Flight Test Squadron, was awarded the Air Force-level 2001 Lt. Gen. Leo Marquez Maintenance award for outstanding civilian technician in the munitions/missile maintenance area.

Named in honor of retired Air Force Lt. Gen. Leo Marquez, the award recognizes maintainers in the categories of aircraft, munitions/missile and communications-electronics maintenance who have demonstrated the highest degree of sustained job performance, job efficiency and results, job knowledge and direct sortie generation involvement.

— Information provided by AFFTC Public Affairs

Lieutenant wins award for information systems

EDWARDS AIR FORCE BASE, Calif. — 2nd Lt. Brent Kruel, 95th Medical Support Squadron, Medical Information Systems Flight commander, was named Air Force Medical Service Information Management and Information Technology Officer of the year for his outstanding performance.

Stationed here since August 2000, Lt. Kruel supervises contractors, civilians, technicians and military personnel in the medical information systems flight. The lieutenant's team is responsible for all information technology-related equipment used by medical facility personnel here.

— Information provided by AFFTC Public Affairs

Joshua Tree Inn named best in Air Force

EDWARDS AIR FORCE BASE, Calif. — Edwards' Joshua Tree Inn recently earned recognition as one of the best dining facilities in the Air Force, winning the 2002 Hennessy Trophy for the single-facility category. The award goes to the best single- and multiple-facility dining programs in the Air Force for excellence in effective management, force readiness support, food quality, employee and customer relations, resource conservation, training and safety awareness.

The evaluation team singled out one of the Joshua Tree's food service troops for special recognition, nominating Senior Airman Leticia Furtado for the Hennessy Travelers' Association award, given to the military person who exemplifies professionalism, attitude and culinary skill.

— Information provided by AFFTC Public Affairs

Museum receives recognition for exhibit audio

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — In a recent ceremony in Marietta, the Ohio Museums Association presented the U.S. Air Force Museum with the 2001 Gold Visual Communications Award for its A-20G "Havoc" Habitat Audio Soundtrack.

The exhibit diorama features a Douglas A-20G "Havoc" World War II twin-engine bomber. The aircraft, painted olive drab and bearing the name of "Little Joe," highlights the "skull and crossed bones" insignia of the 312th Bombardment Group, protruding 50-caliber machine guns, the combat mission scoreboard — one bomb for each mission flown, and the pilot and crew chief's names — Lt. Jones and Master Sgt. Dobrowski. Coconuts sway in the background as life-like mannequins appear to work on the war bird in New Guinea in 1944.

— Information provided by U.S.A.F. Museum Public Affairs

Employee earns Federal Computer Week honor

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — An independent panel of judges selected Mr. Gary Brooks to take his spot alongside 99 other people who have made a difference in the way agencies and companies develop, acquire and manage information technology in the federal arena by Federal Computer Week magazine's annual Federal 100.

Mr. Brooks established AFMC as the Air Force lead on Windows 2000 Active Directory architecture. He also moved AFMC out as the first command to implement a true hierarchical directory, standing up the major command root and sub domains here and at Edwards AFB, Calif. He also generated the requirements and support for a collaborative environment allowing AFMC people to electronically accomplish many business processes and document management functions.

— Information provided by AFMC Public Affairs